



Potential Life Cycle Cost Ideas

Jon Nance , Chief Engineer
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Potential Life Cycle Cost Ideas

- Potential reduction of the 8% interest rate
- Utilization of Vertical Abutments to reduce R/W
- Potential bridge elimination program
- Higher grade sheeting for signs
- Vertical construction under G.S.136
- Technology Initiatives - E plans
- Preservation





Potential reduction of the 8% interest rate

G.S. § 136-113 governs payment of interest in condemnation cases. Interest is paid from the date of the taking of private land to the date that the judgment is signed. It incorporates the interest rate of eight (8%) percent set forth in G.S. § 24-1.

Static interest rate of 8% rarely reflects actual market interest rates and is overly generous in times of low interest rates, and is confiscatory in times of higher interest rates.

Amend the interest statute so that the interest rate is re-set on the yearly anniversary of the taking until the judgment is paid In full. Yearly adjustment to interest rate is fairer to all parties.





Utilization of Vertical Abutments to reduce R/W

Structure 590291

County MECKLENBURG

Date: 09/06/2011

Structure Photo





Potential bridge elimination program





Potential bridge elimination program

NCDOT to evaluate all bridge replacement project candidates to determine whether permanent removal is a prudent option.

There are many cases where loop roads function at an acceptable level as two dead end roads.

There are cases where roads dead end just beyond bridges and serve one or two property owners. Often the property owners have alternate access to their property.

It is prudent and in the best interest of the State to remove those bridges that will not affect local traffic to a large extent.





Higher grade sheeting for signs

Three grades of retroreflective sign sheeting.

Rising electrical service costs and limited maintenance resources are problems for overhead sign lighting (Equipment Cost, Electrical Service Cost and Maintenance Cost)

Overhead signs no longer require the traditional lighting as higher grade retro-reflective sign sheeting is an alternate method for sign illumination. Maintenance cost for lighted sign amounts to \$29,760.00. The maintenance cost for higher grade reflective sheeting is \$0.00(life span of 20 years).





Vertical Construction under G.S.136

Currently, §143-341 states that the powers of the Department of Administration (DOA) include examining and approving all plans and specifications for the construction and renovation of all state buildings or buildings located on state lands.

NCDOT has several types of buildings that are exempted from §143. Highway rest area buildings and facilities, weight stations, and welcome centers are considered highway construction and are subject to §136. NCDOT only submits these projects for review to DOI for review of building code compliance. The reviews were found to be easier inasmuch as the reviews were confined to building code compliance and the delay associated with multiple reviewers was minimal.





Technology Initiatives - E plans

- Real-time information with photos sent to the Engineer to assist in making timely decisions.
- Searchable complete project diaries, better records to avoid claims.
- Project Certification, inspectors have access to database on the project, ability to make direct entries. Material Received Reports will be in electronic format.
- Records retention will be in electronic format, paper savings and storage costs.
- All plans, specifications, and manuals in electronic format.





Electronic Inspection





Electronic Inspection





Preservation

Bridge Preservation Projects: Resurfacing Bridge Decks, Painting Structural Steel, Cleaning / Painting Bearings, Repairing/Replacing Expansion Joints, Pile Encapsulation

Bridge Rehabilitation Projects: Replacing Decks, Spans and Girders, Jacking Bridges (Height), Major System Preservation (electrical, etc.)

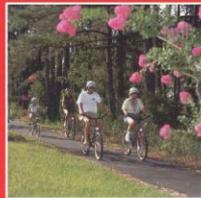
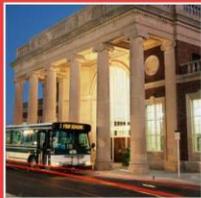
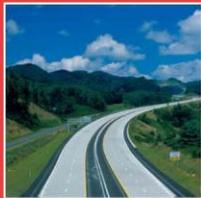
Pavement Projects: Crack sealing, Chip seals, Thin asphalt overlays, Fog seals, Joint cleaning and resealing, Diamond grinding





Painting







I-95 Clearance, Cored Slab





Bridge Jacking





Cracks and Crevices







Questions

